

Environmental Recognition Program



- Area = 3200 Acres
- 2 Hotels (Total of 892 hotel rooms)
- 2 18-hole golf courses
- Free-standing Spa facility

- 5 luxury home developments
- 266 completed condominium units
- Retail/Commercial Complex (2002)
- PUC-regulated wastewater treatment facility

#### **Summary of Environmental Practices**

# Harnessing the Sun...

- Mauna Lani Bay
   Hotel & Bungalows
   100 kW PowerGuard<sup>TM</sup>
   solar electric roof system
- Francis H. I'i Brown Golf Maintenance Facility

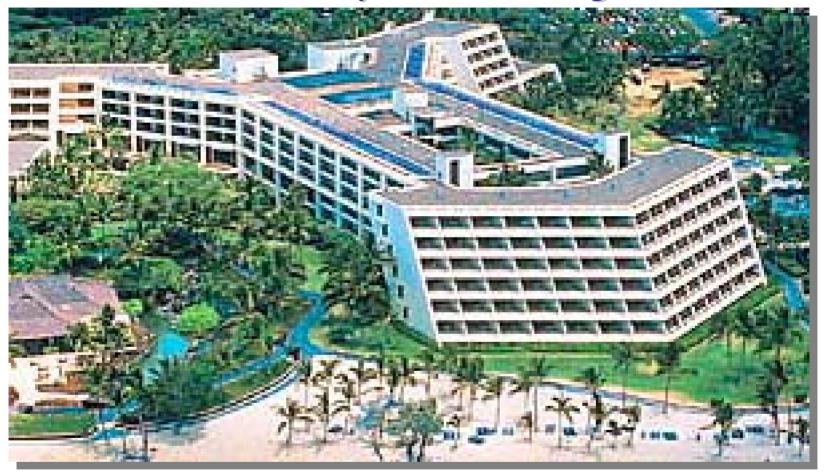
130 kW PowerGuard<sup>TM</sup> solar electric roof system

- Mauna Lani Resort
   Brackish Water
   Delivery System

   250 kW PowerTracker<sup>TM</sup>
   solar tracking system
- Francis H. I'i Brown Golf Course

Suncaddy<sup>TM</sup> Solar Powered Golf Fleet

## Mauna Lani Bay Hotel & Bungalows

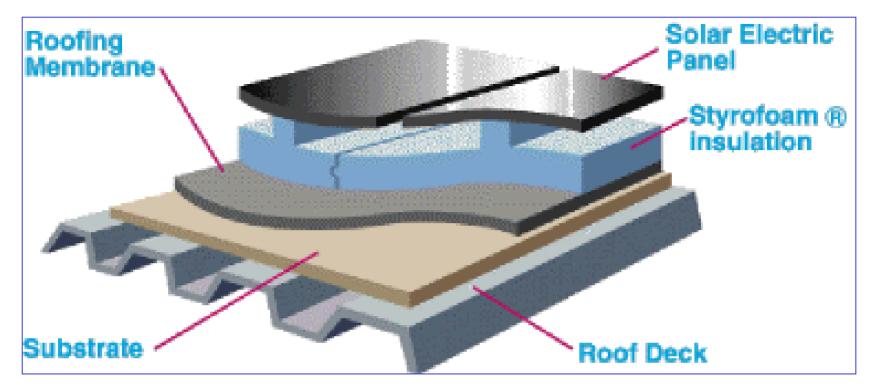


PowerGuard<sup>TM</sup> 100 kW Solar Roof System

# Francis H. I'I Brown Golf Maintenance Facility



PowerGuard<sup>TM</sup> 130 kW Solar Roof System





# PowerGuard<sup>TM</sup> System

# PowerGuard<sup>TM</sup> System Features...

- Utility Bill Savings Feeds clean AC power into the building, displacing high daytime utility rates.
- Modular Design Allows easy expansion and provides up to 10 net watts/sq. ft., meeting the peak load of most large buildings.
- Lightweight Weighs only 5 lbs./sq.ft
- No Roof Penetrations

## PowerGuard<sup>TM</sup> System Features... (Continued)

- Longer Roof Life Protects the roof membrane from harsh UV rays and thermal degradation for 30 years.
- Thermal Energy Savings Reduces air conditioning and heating costs with R-19 insulation and roof shading.
- No Condensation Prevents interior condensation by keeping the dew point above the roofing membrane.

#### Mauna Lani Resort

Solar Powered Brackish Water Delivery System



PowerTracker<sup>TM</sup> 250 kW Solar Roof System

# PowerTracker<sup>TM</sup> System Features...

- Solar Tracking Technology Tracks the sun from east to west on a tilted axis, generating the maximum energy possible.
- More Energy Provides as much as 30% more power than fixed PV structures.
- Uniform Output Produces consistent power from early morning to late afternoon, an advantage for uniform load applications.



# Francis H. I'i Brown Golf Course SunCaddy<sup>TM</sup> Solar Cart Fleet

- Extended Battery Life
- Reduced Recharging Expenses



### **Summary of Environmental Practices**

# Other Initiatives...

#### Summary of Environmental Practices

# **On-Site Green Waste Composting Facility**

- **Age of Facility** 11 Years
- Size 5 Acres
- Service Area Processes all green waste generated within the Resort
- Usage Accepts approximately 5 tons of green waste per day
- Other Facility derives moisture from effluent generated by on-site wastewater treatment facility.
- End Product Breakdown to high-quality compost is 4~5 months. Compost is used on property and sold off-site

#### **Summary of Environmental Practices**

# Resort-Wide Potable Water Conservation Program



# Brackish Water Irrigation Management Program

- Conservation of brackish & potable water resources
- Specification of drought-tolerant plant materials